2689 per 10,000; on the other hand, no less than 7563 were passed in 1899 and 5439 in 1897 at the low measurement of 32 to 33 inches. From these details we may judge how far the average recruit conforms to those physical qualities considered necessary for weight-carrying under chest constriction, for prolonged exertion, for long marching, and for sudden calls upon the vital powers, and what relation he bears to the average of his race, assuming that a height of 5 feet 7½ inches, a weight of 150 pounds, and a chest girth of 36 inches may be taken as an index for males between 18 and 19 years of age. Surely in the youthfulness and immaturity of body of the individuals subjected to army duties and requirements we have an explanation of no small part of the wastage in the early years of service quite outside that dependent on the deleterious agencies of the municipal conditions under which they have been born and brought up. From a consideration of the views of army surgeons at home and abroad the late Professor E. A. Parkes placed the lowest desirable recruitage at 20 or 21 years and from a consideration of the physiological growth of the body, and especially its osseous and muscular tissues, wrote, "These facts show how wrong it is to expect any great and long continued exercise of energy from men so young as 18 and 20, and what will be the inevitable consequences of taxing them beyond their strength." Two recent anonymous writers, one in the *Times* of Feb. 4th and the other in the *Fortnightly Review* of the same month, speak the one of "the miserable weeds that form the bulk of the recruits for the British Army," and the other (in India) of "the weedy undersized recruits who figure so prominently in our ranks," and the foregoing physical details corroborate these opinions. But as regards the subject started by Sir F. Maurice recently, what we want first to ascertain is the proportion of the breakdowns from youth and immaturity of body in the three out of five wastage (and we may add also that for desertion) in order satisfactorily to settle what remains as a groundwork from which to gauge the health status of our race. Be the health standard the highest attainable the age factor in the army problem will still remain.

And, secondly, in respect to the bearings of the army data on the assumed decadence of our community we have for guidance the causes of rejection in the recruiting-room and the invaliding and mortality of early military life. The latter information is not available but the former are as follows, taking the more important ones and giving them in the tabular form as set forth in the Army Medical Report of 1898, for example :—

—	Ratio per 1000 rejected.	Ratio within three months of service.
Under chest measurement	73·88	0·05
Defective vision	42·64	0·09
Under weight	34·82	0·02
Loss or decay of many teeth	26·34	0·22
Under height	21·79	0·03
Disease of heart	17·26	0·60
Defects of lower extremity (fracture, contraction, luxation	17·72	0·35
Disease of veins	15·74	0·21
Impaired constitution and debility ...	5·49	0·45

To these we may append the frequent official remark that the "largest number of rejections was caused by defective development (under height, weight, and chest measurements)" and to make the rejection ratio within three months of service more complete we must add that higher than any of those enumerated stand diseases of the nervous system and weakness of intellect, the former amounting in 1897 to 0·85 per 1000 and the latter to 1·27. Now, if we are right in assuming that defective vision and loss of teeth from decay are, in part at least, to be classed also under developmental deficiencies or defects we come to this conclusion that the main causes of rejection indicate conditions bearing on the limited sections of the community from which the army draws its numbers inimical to normal development and evolution of the body, and we have to go some distance down the list of rejections before we arrive at what are properly disease states, among which figure prominently lesions of the vascular system, these lesions figuring also in the invaliding lists of early military life. And herein seems to me to reside the true bearing of army data on the national health question. The figures show beyond doubt that operating on the sections which are led to take up military life less as a voluntary matter (for to such a procedure the term "voluntary" is as much a misnomer as when applied to the process of taking food and drink into our bodies) than under the stress of economic causes, there are agencies antagonistic to normal development, producing stunted frames incapable of meeting such physical demands as military service produces and in a less degree engendering actual disease states, but in themselves they do not warant the deduction that the recruit defects characterise the community generally. From a consideration of this subject from the national side and from the army side two duties of the community stand out clearly: the one of rectifying the defects of town existence by providing wholesome housing and conditions offering the chance of an attainment of a good physical and moral standard to our poorer brethren, the other of undoing the moral wrong which now rests upon us of subjecting immature lads to army conditions which by clear experience we know no small number of them to be incapable of meeting and which, while adding in no way to military efficiency or strength, do add to the physical deteriorations brought about by the prior unwholesome circumstances of town life.

I am, Sirs, yours faithfully,

FRANCIS H. WELCH,
Surgeon-Colonel (retired), Army Medical Service.

Brandram-road, Lee, S.E., Feb. 21st, 1903.

MALARIA AND MOSQUITOES.

To the Editors of THE LANCET.

SIRS,—In the correspondence that has been going on in the columns of the *Spectator* under the heading "English Winds" great stress has been laid by some of the writers on the fact that although ague has disappeared from certain parts of England, notably East Anglia, for a good many years, yet in the neighbouring parts of Suffolk anopheles are far from being extinct and that in the "Broad district" they are still to be found in large numbers. A statement like this so authoritatively made should be met by investigation at the hands of the supporters of the mosquito theory of malarial fevers to clear the doubt, as the place is much nearer than Sierra Leone.

I am, Sirs, yours faithfully,

P. J. DAMANIA,
Lieutenant-Colonel, late I.M.S.

Whitehall-court, S.W., Feb. 28th, 1903.

*** The anopheles cannot convey the malarial poison unless it is able to feed on the blood of men or animals already suffering from malaria.—ED. L.

ASEPTIC AND ANTISEPTIC SURGERY.

To the Editors of THE LANCET.

SIRS,—It is very helpful to young surgeons to hear from such an authority as Dr. James Laurie that all that is needed to carry out successfully the aseptic method *in private practice* is "a kettle of boiled and one of boiling water and plenty of freshly laundried towels." It would be interesting to me to know whether Dr. Laurie uses the kettle as a steriliser and, if so, it must of necessity be a fish-kettle in order to hold the necessary instruments, as the common tea-kettle is not very well suited to the purpose. Let us suppose the operation to be an amputation in a cottage far removed from enlightened aseptic surgeons either on "this side of the border" or on the other. Our steriliser is singing on the hob, there is no fish-kettle, and the saucepans are at present full of porridge (and would take some hours to render aseptic), and our saws and scalpels will not go in. Where do we look next for a suitable steriliser? If the surgeon has not brought his own fish-kettle and freshly laundried towels he is aseptically up a tree. Being an aseptic idealist he may have a steriliser with him; of course, he is then absolutely safe and may begin work. But—and it is a very big but—a steriliser means at best an extremely bulky addition to his surgical bag, which in his private practice may have to be carried many miles to the place of operation, and then, again, the ideal aseptic surgeon